University of California, Davis Behavioral Health Center of Excellence

California State Evaluation and Learning Support (Cal SEALS) for SB-82 Triage Grants

Deliverable 3: Draft Summative Evaluation Plan

PREPARED FOR:

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Deliverable 3: Draft Summative Evaluation Plan for Adult/TAY Programs

1. Executive Summary

The Mental Health Wellness Act of 2013 (SB-82) provides grant funds to improve access to and delivery of crisis triage services across California. These services focus on increasing capacity in crisis intervention, crisis stabilization, crisis residential treatment, rehabilitative mental health services, and mobile crisis support teams. The overarching goals are to better meet the needs of individuals in crisis in the least restrictive manner, and to cut costs through reduction of avoidable emergency department (ED) use, law enforcement involvement, and inpatient hospitalizations. In this deliverable we describe a mixed methods approach to be used for the Summative Evaluation of Adult/TAY programs funded by SB-82. The quantitative evaluation aims to address five key evaluation questions, described in detail in Section 5.3 Analysis Plans for Key Evaluation Questions, using client and service data, along with additional SB-82 program-specific data, obtained directly from SB-82 grantees. Counties are aggregated according to the stage of the Crisis Continuum targeted by their SB-82 programs and a range of analytic approaches will be used to measure the impact of these programs. Critical contextual factors based on stakeholder feedback are incorporated into these analyses. Options for linkage of these data with other local and state-wide data will be explored. The aim of the qualitative component for the summative evaluation will be hypothesis generating, rather than hypothesis testing. The main aim is to explore how the different crisis programs impact individual clients' path to recovery and well-being from the perspectives of the clients, their family members, providers, community partners, and other community stakeholders.

2. Background

As noted above the Mental Health Wellness Act of 2013 (SB-82) provides grant funds to improve access to and delivery of effective outpatient and crisis stabilization services. A key to improving these services is to hire additional triage personnel. Grant recipients were tasked with designing and implementing pilot projects, which included the hiring of staff in each county. The grants have three initiatives: adults and transitional age youth (Adult/TAY), children and adolescents (Children/Youth), and a collaboration between county behavioral health agencies and schools to promote child wellness (School-County Collaboration). To facilitate cross-county process evaluation and statewide learning, the MHSOAC has required participating grantees to collaborate with an external evaluation team for a statewide evaluation. UC Davis will conduct the evaluation of the Adult/TAY programs

funded by SB-82.

The 15 programs funded by the SB-82 triage grants to serve Adult/TAY individuals are designed to fulfill several roles along the continuum of crisis care, including providing crisis intervention, crisis stabilization, mobile crisis support, intensive case management, and linkage to services across care sectors. Linkage to these services has a goal of stabilizing individuals in their community settings to avoid unnecessary ED visits, hospitalizations, and recidivism in the criminal justice system. They may include Medi-Cal reimbursable targeted case management, peer support, and crisis services. Crisis services may be delivered through mobile programs and located at various points of access in the community to facilitate crisis response. Examples of settings include hospitals, EDs, schools, emergency placement shelters, foster homes, community clinics, jails, juvenile justice settings, homeless shelters, crisis intervention centers, law enforcement settings, nursing homes, and Veterans offices. The goal is to provide timely assessment and immediate support, referrals, and access to settings that support stabilization and are least restrictive.

The MHSOAC's main specified outcomes for the Adult/TAY grants are to: (1) Expand crisis prevention and treatment services; (2) Improve experience, recovery outcomes, and reduce costs; (3) Reduce hospitalizations and inpatient days; (4) Reduce recidivism and law enforcement expenditures; and (5) Expand crisis-recovery oriented early intervention and treatment options. This deliverable outlines the Summative Evaluation Plan for the Adult/TAY programs being implemented in 15 counties across the state. The evaluation uses a mixed methods approach including quantitative and qualitative components described in detail below.

3. Stakeholder Outreach and Engagement

Stakeholder engagement is integral to the evaluation of public health programs. UC Davis intends to assess the feasibility, effectiveness, and generalizability of mental health triage crisis intervention services and outcomes in SB-82 funded programs using an exploratory sequential mixed methods framework that includes stakeholder engagement. Stakeholders' expertise and experiences with SB-82 services and programs provide opportunities for UC Davis to learn about programs' challenges, successes, and areas for improvement. Stakeholders can also provide information that may explain occurrences not clearly shown in the quantitative or qualitative data. Examples of this information include 1) resources and services stakeholders identify as important for mental health crisis interventions, 2) potential outcomes and indicators of program effectiveness and feasibility of these measures, and 3) possible gaps in the mental health and crisis triage literature.

3.1 Plan for UC Davis Stakeholder Steering Committee

UC Davis will initiate and foster relationships with specific stakeholders to build a mental health crisis steering committee. Stakeholders who participate in webinars and MHSOAC quarterly meetings will be included in the committee if they express interest. UC Davis identified stakeholders based on professional and or personal experiences with crisis interventions and categorized individuals into five groups (see table on the next page). UC Davis will continue to complete these activities to incorporate stakeholder's input into the evaluation plan.

- **Phase 1: Planning -** Stakeholders will be contacted to meet at least twice yearly and as needed and asked to provide ongoing feedback regarding the evaluation. Due to the correlation of geographic proximity and interest in participation, UC Davis will focus on engaging with stakeholders located in the Northern California. Limited resources for both UC Davis and stakeholders present challenges with beginning the engagement process on a statewide level. Therefore, as UC Davis's network of stakeholders expands, the university intends to build relationships with stakeholders in Central and Southern California. However, limited resources for both UC Davis and stakeholders present challenges with beginning the engagement process on a statewide level.

Category	Type of Stakeholder
Service Users	• Clients, persons with a history of mental health crises
Family Members/Family Advocates	• Family members of individuals that have received crisis services and are actively involved in their care
Manage, Implement, Oversee	• Government employees • Managers and data analysts from county health programs
Provide Direct Services	• First responders (EMT, firefighters, police, sheriff) • Healthcare providers (ED physicians, psychiatrists, mental health providers, social workers, and nurses) • Nonprofit representatives
Other	• Client advocates • Advocacy groups • Community members

We have identified stakeholders based on expertise, experiences, and knowledge of county mental health triage crisis services. To encourage diverse stakeholder participation, UC Davis will continue to reach out to stakeholders in the categories mentioned above. A list of identified stakeholders will be kept and serve as a guest list for in-person meetings. UC Davis will monitor, update, and track this list as it changes throughout the evaluation and based on stakeholder's attendance to meetings and interest in the project.

- **Phase 2: Data Collection and Evaluation –** UC Davis held its first stakeholder meeting on December 3, 2019, at the Center for Healthcare Policy and Research in Sacramento, CA, led by Marissa Vismara, MPP and Melissa Gosdin, PhD. The UC Davis evaluation team learned about the professional and personal experiences of clients who received mental health crisis triage services and from individuals who provide these services. There were 9 attendees at this stakeholder meeting including a client, client navigator, family advocate, law enforcement representative, pubic school representatives, an emergency medicine physician, representatives from NAMI, and UC Davis officials. The topics discussed at this meeting – including data collection issues and proposed solutions - will be explored in more detail and integrated into the evaluation plan as the project progresses. Initial stakeholder recommendations for contextual data have been included in the quantitative analysis plan below. For a full summary of the event, see Appendix 1.

  In future meetings, stakeholders will provide input on the accuracy of outcome measures and the initial quantitative analysis of SB-82 program effectiveness. They will be asked to share their thoughts on what outcomes they find significant as well as good indicators of a successful mental health crisis program. Stakeholders may also provide information on databases or desired measurable outcomes of interest. No participant or individual stakeholder will be identified in documents summarizing stakeholder input.

- **Phase 3: Analysis and Review of Preliminary Findings -** Stakeholders will be consulted through all phases of the SB-82 evaluation. Thus far, the stakeholder steering committee has provided contextual factors that may influence the evaluation of programs by county. The factors identified on the December 3, 2019, stakeholder meeting included clients' socioeconomic status, race, ethnicity, and access to transportation. They also mentioned the importance of how a county's access to existing community resources and funding for mental health crisis services - other than SB-82 - impacts access and

delivery of services. Stakeholders at the December 3, 2019, meeting shared their experiences with mental health crisis services. Several stakeholders expressed how a lack of continuity of care and inconsistencies in reporting system level data can complicate the evaluation of county programs. Stakeholders suggested possible solutions to ensure that mental health care is continuous, such as providing individual and personalized care, akin to the treatment of other chronic health conditions. Stakeholders reported being highly engaged in the process and expressed interest in attending biannual meetings. They provided UC Davis staff names of additional people to include in the group, such as community partners serving homeless populations. An electronic survey was submitted to stakeholders who attended the December 3, 2019, meeting to evaluate the meeting and facilitators' effectiveness and cultural sensitivity.

- **Phase 4: Final Reporting -** Stakeholders will provide UC Davis with suggestions and feedback on how findings, results, and final reports should be disseminated throughout the evaluation process. Stakeholders will be asked specifically to help identify and reach out to groups and or individuals that are interested in the results (e.g. nonprofits, state health agencies and other community-based organizations). Additionally, cost and time effective distribution and frequency of email, newsletters, presentations, webinars and or conferences will also be addressed.

3.2 Stakeholder Communication Plan

UC Davis plans to communicate with stakeholders on a consistent and regular basis. We will hold meetings in Sacramento every six months with stakeholders who will be invited to attend in-person or via teleconference. These meetings will provide an opportunity for UC Davis staff to meet face-to-face and forge partnerships with stakeholders. UC Davis will respond to stakeholders' inquiries, emails, calls, and other communication in a prompt and timely manner. A project newsletter will also be circulated electronically.

In addition to the stakeholder activities detailed above, the evaluation team will host a monthly Data Coordination Workgroup. This group will be open to all SB-82 funded county-level program managers and analysts responsible for either collecting, storing, retrieving, or transferring data necessary for the statewide evaluation. The group will be critical to fostering a collaborative partnership between county-level providers and analysts, and between the county staff and the statewide evaluation team. The workgroup will provide a forum for counties to learn best practices from each other,

develop and review the feasibility and effectiveness of statewide evaluation protocols, and provide ongoing support.

4. Key Stated MHSOAC Project Goals from the Logic Model

Goal 1	Expand crisis prevention and treatment services
Goal 2	Improve experience, recovery outcomes, and reduce costs
Goal 3	Reduce hospitalizations and inpatient days
Goal 4	Reduce recidivism and law enforcement expenditure
Goal 5	Expand crisis-recovery oriented early intervention and treatment options

5. Quantitative Evaluation

5.1 Quantitative Evaluation Framework

Question-Based Approach: To conduct a rigorous quantitative analysis that addresses stakeholder needs and can be implemented with available data, our framework will be based on vetting well-specified and testable evaluation questions. For our purposes, a well-specified evaluation question requires the specification of these key elements: 1) population, 2) exposure/intervention, 3) comparator, and 4) outcome. Population, for our purposes, will be specified by eligible individuals and their states during specific calendar periods of interest.

Key evaluation questions were constructed by reviewing the key outcomes from the SB-82 logic model (Appendix 2) based on the MHSOAC's stated project goals, listed in Section 4 Key Stated MHSOAC Project Goals from the Logic Model. In this review, we determined the outcomes most appropriately evaluated using quantitative methods, taking into consideration our best understanding of available data elements from the counties, other available data sources, and stakeholder feedback. We applied the question-based approach to these key outcomes to construct five key evaluation questions and analysis plans, detailed in Section 5.3 Analysis Plans for Key Evaluation Questions.

Working with Stakeholders: Our investigative team will systematically confirm relevance and data availability by continuing to work with stakeholders (including through the Formative Evaluation process detailed in Deliverable 4), recognizing that either attribute may change over time. In the following, we propose evaluation questions based on our current best understanding of what is relevant and available.

Statistical Analysis for Program Effects: To address evaluation questions involving program effects, we will rely primarily on the use of regression analyses within a generalized linear modeling framework, with extensions for longitudinal or otherwise clustered data when appropriate. This framework can accommodate binary, count, and continuous outcomes. In addition to the specification of the evaluation question, the remaining elements necessary to specify and fit the regression models will be the units of analysis, typically individual clients or individual client-periods to accommodate event history analysis, but may sometimes be county-level time-series. Covariates that can be used in the analysis to minimize confounding will be specified.

Data Collection and Descriptive Analysis: Based on the work described in Deliverable 4, the Formative Evaluation, we will collect data *directly* from counties that received SB-82 grants to expand crisis prevention and treatment services. The quantitative evaluation will build on the program descriptions outlined through interviews and surveys with county program personnel described in Section V, Question 1 of Deliverable 4 (pages 5-6), adding counts of clients served in each county by type of grant-funded service provided. Grant-funded services have been oriented to the Crisis Continuum (Appendix 3) and counties have been assigned to priority clusters as described below. Services are distinguished as new programs or an augmentation of existing programs. Descriptive statistics will evaluate the number of clients over previous baseline for each service type. We will describe demographics of clients served, including age distribution, gender, race-ethnicity, and mental health conditions (if known). We will consider county characteristics including rural/urban distribution of population and median income.

Data Assembly: The primary data to support our evaluation of costs and outcomes will be obtained directly from the counties and will consist of county-delivered service and client data that is based on information that counties already collect for reporting to the Client & Service Information (CSI) system. Clients receiving SB-82 funded services can be flagged by the counties providing this data. Such data is already collected by counties to report to the state and its provision directly to the evaluation team will enable our evaluation of services delivered. These include hospitalizations, services targeted for reduction through expansion of crisis intervention services. In addition, this will allow us to estimate costs of services delivered.

Supplemental data sources that may provide additional information on SB-82 client outcomes are available from the counties, including the Adult Needs and Strengths Assessment (ANSA). ANSA has limitations as a metric

because it is only administered during initial assessment and intermittently when there is a significant change in needs - generally a deterioration in the client's mental state. Additionally, counties have reported significant issues collecting client-reported outcomes. Clients in crisis are unlikely to produce reliable responses due to the acute crisis, and counties are often unable to collect data from clients post-discharge resulting in large amounts of missing data. Despite these issues, it may still provide data on client recovery outcomes (described in detail on pages 13 and 14 of Deliverable 4). In addition, we will continue to explore linkage to state data sets, including data available from California's Office of Statewide Health Planning and Development (OSHPD) and Department of Justice (DOJ). In the absence of the option for linkage, we will use unlinked, county specific OSHPD data for an analysis of emergency room utilization for mental health crises over time targeting specific hospitals (based on input from county programs). Finally, we will adopt a mixed-methods approach and integrate the findings from the quantitative analysis with those of the qualitative analysis to provide context and integration of findings. This will integrate input to be provided by county program staff, county SB-82 clients, client family members, and local law enforcement agencies.

5.2 Priority Clusters

The counties receiving SB-82 grants implemented a variety of programs ranging from a crisis hotline that clients can use to obtain immediate help and county resources, to creating or expanding mobile crisis response teams that can respond to mental health crisis events in the field. The evaluation team conducted interviews with SB-82 grantee counties between April and August 2019 to gather information about the programs each county implemented. The information the evaluation team gathered from these interviews is summarized in Attachment 1: County Interview Summaries.

The variety of programs provides some challenge to evaluation, but also an opportunity to learn about the impacts of various mental health crisis interventions. The evaluation team used the information gathered in county interviews together with the Crisis Continuum (Appendix 3), a conceptual framework describing the treatment stages of a mental health crisis, to define priority clusters for Adult/TAY services as described below.

In addition, we have outlined in Deliverable 4 the key activity types and objectives of the new or augmented services funded by SB-82 grants. We will add variables to our dataset that characterize time-varying information on these services, as described below. These time-varying indicators will allow us to operationalize independent variables in our regression analyses that correspond to the "Exposure/Intervention" and "Comparator" elements for our evaluation questions. For example, a time-varying indicator for

exposure to an "expanded mobile crisis service" can be based on the county and calendar time of implementation of such programs and coded "1" for post-implementation time and "0" for pre-implementation time. The coding of such variables can be readily implemented in standard statistical analysis computing environments, like SAS or Stata.

Program Classification: Based on information gathered during county interviews, we identified the stage(s) along the crisis continuum targeted by each SB-82 program, and clustered counties into overlapping sets of priority clusters according to the Crisis Continuum stages. Clustering allows us to compare groups of counties in a meaningful way that also permits the construction of larger samples to improve statistical power and provide more variation in outcome variables.

We propose three priority clusters based on the mapping of county SB-82 programs onto the crisis continuum: First Responder, Crisis, and Linkage. The First Responder cluster consists of Butte, Humboldt, Los Angeles, San Francisco, Sonoma, and Yolo counties. The Crisis cluster consists of the city of Berkeley, Los Angeles, Merced, Sacramento, San Francisco, Stanislaus, and Tuolumne counties. The Linkage cluster consists of Alameda, Butte, Calaveras, Humboldt, Merced, Placer, Sacramento, San Francisco, Tuolumne, and Ventura counties, along with the city of Berkeley. The priority clusters and relevant outcomes are provided in Appendix 4.

The identification of priority clusters allows the evaluation to focus on outcomes relevant to each priority cluster. For example, First Responder programs are clearly designed to reduce law enforcement involvement with crisis clients but are unlikely to reduce the number of referrals from emergency departments. Hence, we utilize clusters to focus our evaluation questions on the relevant county programs.

5.3 Analysis Plans for Key Evaluation Questions

Question 1: Among behavioral health clients, do SB-82 programs for Adults/TAY reduce the rate of psychiatric hospitalizations?

Analysis: Evaluation Question 1 addresses Outcome 1: "Reduce the number of psychiatric hospitalizations," related to Goal 3: "Reduce hospitalizations and inpatient days." A key function of the SB-82 program is to reduce the utilization of hospital resources by individuals in mental health crisis and instead stabilize the person in crisis so that hospitalization is not needed. In general, this is a goal common to all SB-82 programs. To address this question, we will assemble a cohort of county mental health program clients (including SB-82 clients) during a calendar period that includes at least 2

years prior to SB-82-funded program expansions and at least 2 years post-expansion. We will use log-linear Poisson models and an event history analysis framework for recurrent events to estimate and compare adjusted age-specific hospitalization rates after and before program expansions, with statistical adjustment for client demographics. This approach allows us to account for time-varying indicators of program exposure as well as between-client variation in time at-risk for hospitalization that arise from different entry and exit dates of clients from the cohort. To implement this, each person's follow-up time is divided into non-overlapping person-periods, with the time-varying independent and dependent variables updated accordingly, and with the natural log of the person-period length entered into the model as an offset. In secondary analysis, we will use quantitative data on program implementation that we will collect as part of Deliverable 4 (see details regarding Question 1 on pages 5-6, Questions 3 through 6 on pages 8-14, and Question 8 on pages 15-17) to develop time-varying quantitative measures of program implementation to quantify how variation in program implementation is associated with changes in age-specific hospitalization rates.

In addition, we will evaluate the specific effects of different program types on clients using variables that encode the priority cluster classifications described above to form subgroups of interest and/or to fit interaction terms involving the cluster classifications and the intervention term. These strategies allow us to assess whether intervention effects vary according to the stage of the crisis continuum that the programs in each county are designed to target.

The primary outcome variable we will use to estimate a treatment effect will be based on the client-service level "service function" variable collected by counties for reporting to the CSI database. This variable records whether a client received services at a hospital. We will code an indicator variable that takes the value 1 when, for the given person-period, a client receives hospital-based services for a given encounter and a zero otherwise. Regression of this outcome variable on this post-SB-82 indicator and age, along with a set of client and county-level covariates, in a multiple Poisson regression analysis with robust standard errors will allow us to estimate a treatment effect of SB-82 on the age-specific rate of hospitalization.

Sample: Based on grant proposals prepared by each county, we expect the estimated targeted sample size in each priority cluster to be the best approximation of the sample size we expect to have for analytic projections. Based on this assumption, we expect to have approximate sample sizes of 9,700 individuals from the First Responder cluster; 9,500 from the Crisis cluster; and 9,000 from the Linkage cluster.

The proposed sample sizes will provide ample power to detect modest but clinically significant relative reductions in the rate of hospitalizations or other outcome events for most analyses, even in analyses restricted to observations from a single priority cluster. For example, a sample size of 10,000 person-years in each of the pre-implementation and post-implementation program periods would provide greater than 80% power to detect reductions in an outcome rate from 0.100 per person-year in the pre-implementation period to 0.0875 per person-year in the post-implementation period. Statistical power depends directly on the outcome rate, so we can detect even smaller reductions for events that occur at a higher rate or that will be observed over longer periods of time.

This comparison between the pre- and post-SB-82 periods will allow us to measure a change in the rate of hospitalization as a result of SB-82 expansions equivalent to the average treatment effect, $E[Y_{1i} - Y_{0i}]$, where Y_{Ti} is individual i's outcome and $E[A]$ denotes the expected value operator, the population average of random variable A. The ATE is the average effect of the treatment on behavioral health clients. One advantage of this methodology is it does not require the ability to personally identify clients - an anonymous client identifier is sufficient.

Confounders: To control for potential client-level confounders we will include demographic and client history control variables that can be operationalized using the county-delivered service and client data found in the Electronic Health Record (EHR) (and reported to the CSI system). We will include county-level covariates such as average income and sociodemographic characteristics to control for potential differences in probability of hospitalization related to the characteristics of a county's population. Additionally, we will include in the regression model specifications of county-level fixed effects to account for unobserved differences in county mental health systems that may differentially impact the probability a client is hospitalized in one county relative to others. Lastly, based on stakeholder feedback, we will include covariates to control for county contextual factors that may differentially affect the probability of hospitalization between counties. These contextual factors will include controls for the public transportation infrastructure in a county, which may affect the probability of hospitalization through a client's ability to access mental health services throughout their county of residence, as well as controls for the differences in Medi-Cal managed care plans between counties. We anticipate that some county Medi-Cal managed care plans will offer greater access to integrated behavioral health services as part of primary care.

Question 2: Among counties receiving SB-82 grants, did SB-82 expansions reduce the rate of mental health emergency department encounters?

Analysis: Evaluation Question 2 is derived from Outcome 3: "Reduce emergency department time spent providing care to individuals in crisis", which relates to Goal 1: "Expand crisis prevention and treatment services" and Goal 5: "Expand crisis-recovery oriented early intervention and treatment options." This outcome of interest focuses on reducing the utilization of emergency departments by clients with mental health emergencies by managing crises through county behavioral health crisis services. This outcome is particularly relevant in counties expanding services that target the "crisis" stage of treating a mental health crisis, such as the First Responder and Crisis priority clusters. These data are not recorded in county EHR's but ED utilization for primary mental health problems can be obtained from California's Office of Statewide Health Planning and Development (OSHPD).

To address this question, we will obtain ED encounter data linked to hospital admission from OSHPD for all counties. This dataset will contain longitudinal data for all clients with at least one ED encounter for a primary mental health diagnosis (see Appendix 5 for a partial list of ICD-10 codes) at least one year prior to, and one year after the SB-82 expansion, and will include those discharged from the ED and those requiring hospital admission. We will model mental health ED encounters as the realization of a multi-stage model wherein a person begins as "not at risk" (0 ED encounters). After their first emergent mental health crisis within the timeframe of the data, the client becomes "at risk" of repeated ED encounters (1 ED encounter). Finally, an "at risk" client could return to the ED for treatment of an emergent mental health crisis, in which they become a "repeated ED crisis" client (2+ ED encounters). An effective countywide crisis intervention should reduce the rate at which an "at risk" client transitions to the "repeated ED crisis" state. Using count data regression models, such as the Poisson models described above, we will compare the rate of repeated ED encounters over time between counties with and without expanded crisis services under SB-82 with statistical adjustments for client-specific controls, county-level demographic and economic characteristics, and stakeholder contextual factors such as differences in Medi-Cal managed care plans across counties. In addition, we will repeat the analysis limiting it to EDs at hospitals most likely to be utilized by county mental health clients (as identified by the county programs). Focusing on rates of utilization in these targeted hospitals will be most likely to reveal impacts of the SB-82 programs on ED utilization for mental health crises.

Sample: The sample used for this analysis would consist of all persons with at least one ED encounter with a primary mental health diagnosis from all SB-82 counties over at least a two-year period. An existing analysis of OSHPD emergency department encounter data performed by the Center for Healthcare Policy and Research (CHPR) using data from 2014 identified 30,700 ED encounters in First Responder priority cluster counties with a primary mental health diagnosis and 35,100 ED encounters in Crisis priority cluster counties with a primary mental health diagnosis. Given that ED encounters have been increasing over time, we can conservatively estimate a sample size of approximately 60,000 individuals over two years in each priority cluster based on 2014 data. Assuming a conservative estimate of 2,500 encounters during a comparator time period, our methodology would permit us to detect when the encounter rate is reduced as little as 10% during a similar intervention calendar period with at least 90% power.

Confounders: To control for potential client-level confounders we will include demographic and client history controls included in OSHPD data. We will include county-level factors such as average income and sociodemographic characteristics to control for potential differences in probability of hospitalization related to the characteristics of a county's population. Additionally, we will include a county fixed effect to account for unobserved differences in county mental health systems that may differentially impact the probability that a client visits the ED or is hospitalized in one county relative to others. Lastly, based on stakeholder feedback, we will include covariates to control for county contextual factors that may differentially affect the probability of hospitalization between counties. These contextual factors will include a control for differences in Medi-Cal managed care plans between counties. Differences in provision and quality of mental health services across Medi-Cal managed care could potentially affect a client's probability of hospitalization.

Question 3: Among clients seeking county mental health crisis services, do SB-82 programs reduce the time law enforcement officers spend with crisis clients?

Analysis: Evaluation Question 3 is derived from Outcome 4: "Reduce law enforcement time spent with crisis clients", which relates to Goal 1: "Expand crisis prevention and treatment services" and Goal 4: "Reduce recidivism and law enforcement expenditure." First responder crisis intervention services, such as mobile crisis response teams, provide services in the field to clients in crisis, particularly when a client's initial contact with community-based services is with law enforcement. Thus, reducing the amount of time law enforcement personnel spends with crisis clients serves both law enforcement, through more efficient usage of resources, and clients, through

faster provision of crisis stabilization resources. Hence, aside from improving the array of crisis services, one of the main goals of SB-82 is to expand first response services to reduce the amount of time law enforcement spends with clients experiencing a mental health crisis. This evaluation will focus on the First Responder priority cluster.

Evaluating this question will depend crucially on the quality of data collected by counties in the SB-82 supplemental dataset. Thus, we have identified two methods that rely on different types of data to maximize our ability to credibly answer this evaluation question. The first method will use baseline time tracking data from counties that provide information about the amount of time a law enforcement officer spends in the field with an individual experiencing a mental health crisis. This baseline sample will consist of all the available encounters from the initial period of data collection in the early stages of program implementation. We will use this baseline data together with data collected after the baseline period in a regression framework to estimate the effect of full program implementation on law enforcement time-in-the-field using a regression model for nonnegative outcomes. The appropriate model will depend on the distribution of the client-level cumulative time-in-field outcome and will be determined by preliminary data analysis visualizing this outcome distribution. This analysis will provide estimates of the effect of the mobile response teams in reducing the typical amount of time law enforcement officers spend in the field.

An alternative strategy will estimate and compare the probability that a law enforcement response to a mental health crisis client results in an arrest or jailing. This method is derived from the hypothesis that a mobile response team should divert crisis clients from being arrested or jailed as a result of law enforcement contact. We will assemble a sample of all mobile response team encounters, call log, and law enforcement information collected by counties in the SB-82 supplemental dataset. In counties where mobile response teams are only available within specific hours of operation, we will compare the likelihood a law enforcement response results in an arrest just before and just after mobile response services become available. This quasi-experimental design called regression discontinuity relies on the assumption that the probability an individual experience's a mental health crisis is independent of the timeframe in which mobile response services are available (Thistlethwaite and Campbell, 1960). That is, as long as the occurrence of mental health crises are randomly assigned within small windows of time around opening and closing of mobile response services during a given day, then we will be able to directly observe the causal effect of mobile response teams on the probability an individual in mental health crisis is arrested or jailed. This alternative method relies on more detailed data than the first method but may be available from counties based on

Triage round 1 data collection reports provided by the OAC. Regression discontinuity provides an estimate of the average treatment effect, $E[Y_1 - Y_0]$, where $E[\cdot]$ is the expected value operator, and $Y_1 - Y_0$ is the difference in outcome Y between the treated and untreated group.

Sample: Based on grant proposals prepared by each county, we expect the estimated targeted sample size in each priority cluster to be the best approximation of the sample size we will have for analytic projections. Based on this assumption, we will have a sample of approximately 9,700 individuals from the First Responder cluster. Assuming a sample size of 9,700 individuals, our methodology will allow us to measure a reduction in time-in-field by as little as 7% over the entire study period with approximately 90% power.

Confounders: Each of these methods require different controls to achieve a credible estimate of the effect of mobile response teams on each respective outcome. The first method requires individual-specific demographic and client history controls to account for person-specific confounders, county-level controls such as county demographic and economic characteristics to control for county-specific confounders, as well as controls for contextual factors such as controls for public transit infrastructure and Medi-Cal managed care plans to capture differences across counties that may impact access to existing mental health care services which in turn could affect the probability an individual may experience a mental health crisis. The alternative, regression discontinuity design does not require individual-specific controls as mental health crises are likely to be randomly assigned on either side of opening and closing times. However, county-specific controls such as county demographics and mean income may differentially affect the probability of mental health crisis across counties. For the same reason, we will also need to control for the same contextual factors identified above, as these may also differentially affect the probability that an individual may experience a mental health crisis.

Question 4: Among SB-82 programs linking behavioral health clients to follow-up mental health services, were clients more likely to utilize post-crisis behavioral health services?

Analysis: Evaluation Question 4 is derived from Outcome 5: "Increase the rate of linkage to behavioral health services following crisis" which relates to Goal 1: "Expand crisis prevention and treatment services", Goal 2: "Improve experience, recovery outcomes, and reduce costs", and Goal 5: "Expand crisis-recovery oriented early intervention and treatment options." Of the fifteen SB-82 grantee counties, ten counties plus the city of Berkeley used SB-82 funds to expand services that link mental health crisis clients to

follow-up, post-crisis behavioral health services such as outpatient psychiatric care, long-term housing, and other community-based mental health care treatment services. The linkage priority cluster, which consists of counties implementing SB-82 programs focused on linking mental health crisis clients with follow-up services, will be the primary focus of this evaluation question.

We will assemble a cohort of county behavioral health clients from at least 1 year prior to and at least 1 year after implementation of the SB-82 service expansion to evaluate the effect of the expansion of linkage services on the utilization of post-crisis services. The outcome of interest is whether clients were more likely to utilize follow-up behavioral health services in the 6 weeks following a mental health crisis encounter as measured by the probability a client is observed receiving post-crisis services. We will use data from county mental health EHRs and SB-82-specific service utilization data provided by the counties to observe whether a client received post-crisis community-based services. We will be able to observe when a client receives linkage services within the county behavioral health system and whether the client subsequently utilizes the services to which they were linked within the following 6-week period. An indicator variable will be coded "1" when we observe utilization of post-crisis services and zero otherwise. We will analyze this outcome variable using fixed effects multiple logistic regression to estimate the probability a client utilizes follow-up behavioral health services. We will estimate the effect of the SB-82 expansion of linkage services on this outcome by comparing the change in probability due to the expansion of linkage services within the linkage priority cluster. Optionally, we could also compare the outcome variable across linkage and non-linkage SB-82 grantee counties.

A simple pre-post or between-county analysis, however, will not account for selection due to client-specific confounders. A credible estimate of the effect of expanded linkage services must account for selection effects. We can adjust for this problem by using client-level data from the county mental health EHRs to predict the probability a client would receive linkage services in an SB-82 linkage county in the post-period, a dependent variable that can be constructed from the "service function" variable in county EHR data and SB-82 supplemental service data. Using this conditional probability of receiving linkage services, we will match clients from the pre-SB-82 period, or from SB-82 grantee counties not focused on service linkage, to clients in linkage counties after the SB-82 expansion using the coarsened exact matching algorithm. This method constructs credible treatment and control groups under the assumption that the distribution of pretreatment variables is the same for individuals with the same conditional probability of receiving SB-82 linkage services. The elimination of selection bias allows us to

estimate the average effect of the treatment on the treated, $E[Y_{1i} - Y_{0i}|T_i = 1]$ (Dehejia and Wabha, 1999), where Y_{Ti} is individual i's outcome given treatment ($T_i = 1$) or nontreatment ($T_i = 0$), and $E[A|B]$ denotes the conditional expected value operator, the population average of random variable A holding B constant. The average effect of the treatment on the client is the average effect of the treatment on individuals who were treated, or the difference between individual i's outcome when she is treated, Y_{1i}, and the same individual's outcome in a counterfactual world in which they were not treated, Y_{0i}.

Sample: Based on grant proposals prepared by each county, we expect the estimated targeted sample size in each priority cluster to be the best approximation of the sample size we expect to have for analytic projections. Based on this assumption, we expect to have a sample size of approximately 9,000 individuals from the Linkage cluster.

Confounders: To control for potential client-level confounders we will include demographic and client history controls included in the county-delivered service and client-data based on county mental health EHR data that is reported to the CSI system. Additionally, we will include county-level factors such as average income and sociodemographic characteristics to control for potential differences in probability of hospitalization related to the characteristics of a county's population. Additionally, we include a county fixed effect to account for unobserved differences in county mental health systems that may differentially impact the probability a client is hospitalized in one county relative to others. Lastly, based on stakeholder feedback, we will include covariates to control for county contextual factors that may differentially affect the probability of hospitalization between counties. These contextual factors will include controls for the public transportation infrastructure in a county, which may affect the probability of hospitalization through a client's ability to access mental health services throughout their county of residence, as well as controls for the differences in Medi-Cal managed care plans between counties. Differences in provision and quality of mental health services across Medi-Cal managed care could potentially affect a client's probability of hospitalization.

Question 5: Among counties receiving SB-82 grants, do SB-82 expansions reduce recidivism among behavioral health clients?

Analysis: Evaluation question 5 is derived from Outcome 4: "Reduce law enforcement time spent with crisis clients", which relates to Goal 4: "Reduce recidivism and law enforcement expenditure." A key outcome for SB-82 crisis triage services identified by the MHSOAC includes the reduction in recidivism among mental health crisis clients. This evaluation question is

relevant to all SB-82 grantees; we will assess this evaluation question for all priority clusters. As part of the data collected by the counties, we will obtain arrest and conviction data for all behavioral health clients in the 18 months prior to SB-82 program implementation up to the date of data collection (see Section 5.4 Data Sources for more details). To assess the effect of SB-82 grants on recidivism, we will use a similar analysis framework as that used in Evaluation Question 1. We will assemble a cohort of individuals who were county mental health system clients (extracted from the county mental health EHRs) during a calendar period that includes at least 18 months prior to SB-82-funded program expansions and at least 18 months post-expansion. We will use log-linear Poisson models and an event history analysis framework for recurrent events to estimate and compare adjusted age-specific recidivism rates after and before program expansions, with statistical adjustment for client demographics. This approach allows us to account for time-varying indicators of program exposure as well as between-client variation in time at-risk for recidivism that arises from different entry and exit dates from the cohort. To implement this, each person's follow-up time is divided into non-overlapping person-periods, with the time-varying independent and dependent variables updated accordingly. The natural log of the person-period length will be entered into the model as an offset. In secondary analysis, we will use quantitative data on program implementation described in Deliverable 4 (see Question 1 on pages 5-6, Questions 3 through 6 on pages 8-14, and Question 8 on pages 15-17) to develop time-varying quantitative measures of program implementation to quantify how variation in program implementation is associated with reductions in age-specific recidivism rates.

In addition, we will evaluate the specific effects of different program types on clients served by these programs, using variables that encode the priority cluster classifications described above to form subgroups of interest and to fit interaction terms involving the cluster classifications and the intervention term. This strategy will allow us to assess whether intervention effects vary according to the stage of the crisis continuum targeted by the programs in each county.

Sample: We expect the estimated targeted sample size in each priority cluster to be the best approximation of the sample size we expect to have for analytic projections. Based on this assumption, we expect to have approximate sample sizes of 9,700 individuals from the First Responder cluster; 9,500 from the Crisis cluster; and 9,000 from the Linkage cluster.

The proposed sample sizes will provide ample power to detect modest but clinically significant relative reductions in the rate of recidivism or other outcome events for most analyses, even in analyses restricted to

observations from a single priority cluster. For example, a sample size of 10,000 person-years in each of the pre-implementation and post-implementation program periods would provide greater than 80% power to detect reductions in an outcome rate from 0.100 per person-year in the pre-implementation period to 0.0875 per person-year in the post-implementation period. Statistical power depends directly on the outcome rate, so we can detect even smaller reductions for events that occur at a higher rate or that will be observed over longer periods of time.

This comparison between the pre- and post-SB-82 periods will allow us to measure a change in the rate of recidivism as a result of SB-82 expansions equivalent to the average treatment effect, $E[Y_{1i} - Y_{0i}]$, where Y_{Ti} is individual i's outcome and $E[A]$ denotes the expected value operator, the population average of random variable A. The ATE is the average effect of the treatment on behavioral health clients. One advantage of this methodology is it does not require the ability to personally identify clients - an anonymous client identifier is sufficient.

Confounders: To control for potential client-level confounders we will include demographic and client history controls included in the county-delivered service and county mental health client data extracted from the EHR in each county. We will include county-level factors such as average income and sociodemographic characteristics to control for potential differences in the probability of arrest related to the characteristics of a county's population. Additionally, we include a county fixed effect to account for unobserved differences in county mental health systems that may differentially impact the probability a mental health client is arrested in one county relative to another. Lastly, based on stakeholder feedback, we will include covariates to control for county contextual factors that may differentially affect the probability a mental health client is arrested between counties. These contextual factors will include controls for the public transportation infrastructure in a county, which may affect the probability of arrest through a client's ability to access mental health services throughout their county of residence, as well as controls for the differences in Medi-Cal managed care plans between counties. Differences in provision and quality of mental health services across Medi-Cal managed care could potentially affect a client's probability of arrest.

5.4 Data Sources

County-Level Client and Service Data: California requires county mental health programs to report monthly client-level service utilization data to the Client & Service Information (CSI) system, a statewide database maintained by California's Department of Health Care Services (DHCS). Counties have

reported detailed information about client-level utilization of county-funded mental health services such as demographics, the types of services used, admission details, detailed service utilization, and client disposition since 2007.

We determined two limitations with using data directly from the CSI system. The first limitation is that counties do not submit SB-82-specific information to the CSI system. This client-level information remains with counties in their respective EHR systems. Second, through correspondence with the counties and experts familiar with CSI we have learned that data in the CSI system varies in quality over time and between counties. To overcome these limitations, we plan to collect the same long-term data directly from counties as data can be exported directly from the county mental health EHR. We will use the structure and data elements contained in the CSI system as a baseline for the datasets we will request from counties.

We will request a dataset from the counties containing client-level service data that includes client sociodemographic information such as age, race, ethnicity, education, and employment status. For each client, we will also have a record of service utilization that includes the date of service, the mode of service, service function, units of time for each service, the client's disposition at the end of service, whether a client was admitted voluntarily, the admission necessity code, place of service, and whether services a client received meets definition of an evidence-based service according to the Substance Abuse and Mental Health Services Administration (SAMHSA). Additionally, we will have information about the client such as whether they have experienced trauma and the type, whether the client has a substance dependence, and the results of an Axis-V Global Assessment of Functioning (GAF) test if the client was assessed. See Appendix 6 for a table of variables and their descriptions. Hence, this dataset will provide a rich set of client-level information and service utilization history for the evaluation team to analyze. Collaboration with the counties to ensure collection of this data is consistent across counties and is ongoing as part of the Formative Evaluation plan, described specifically in Question 6 of Deliverable 4 on pages 12-14.

County SB-82 Supplemental Data: In addition to collecting EHR-based data described above from the counties, the evaluation team is working with the counties to collect data specific to SB-82 programs. The process of collaborating with the counties to collect data specific to each county's SB-82 service expansion is ongoing. The evaluation team will work closely with county data coordinators to design data extraction forms that can be implemented by each county to produce the datasets necessary for both the Summative and Formative Analysis Plans, details of which are described as

part of Question 6 on pages 12-14 of Deliverable 4. The draft form is currently being designed with input from SB-82 grantees, and will include information such as the county client number, call log information (e.g., time and duration), time and duration information for mobile crisis teams, and additional service and client disposition information for clients receiving services specific to the SB-82 expansion. We will also collect as much of the individual- and system-level data from Triage Round 1 as is available from the counties.

OSHPD Emergency Department Encounter Data: The California Office of Statewide Health Planning and Development (OSHPD) collects individual client data from emergency departments across California on a quarterly basis, which can be obtained by the evaluation team through a data request process that will take approximately 6-9 months. The emergency department data set includes up to 24 diagnoses, demographic data such as age, gender, race, and ethnicity, as well as clinical, payer, and facility information such as disposition, source of payment, and primary diagnosis from hospitals licensed to provide emergency medical services. An ED encounter is defined as a client that has a face-to-face interaction with a medical provider, a group consisting of Medical Doctors, Doctors of Osteopathy, Doctor of Dental Surgery, or Doctors of Podiatric Medicine. To obtain a full picture of ED utilization, ED data must be linked to the hospital data set, as clients who are admitted to the hospital after presenting to the ED are only included by this linkage. This analysis can be conducted with or without client identifiers from the counties that allow individual level linkages to county clients. We will identify mental health emergency department encounters by cross-referencing a client's primary diagnosis against a list of ICD-10 mental health diagnosis codes (see Appendix 5 for a partial list of the 250 major ICD-10 codes; our full list contains over 1,350 detailed codes).

Justice Outcomes Data: On 10/1/2019 members of the UC Davis evaluation team met with researchers from the California Department of Justice Research Center (DOJRC) in order to explore the possibility of linkage of state-held justice data to county/state held behavioral health data. Unfortunately, the outcome of this meeting was that such linkage would not be possible for two reasons: 1) the DOJRC would require the receipt of identifiable client-health information which the research team would not be permitted to share, and 2) due to the DOJRC's "need to know, right to know policy" they would not be permitted to provide justice data on non-SB-82 clients, meaning efforts to conceal client health information in a larger sample pool would not be possible.

With state-held DOJ data not available for the purposes of this evaluation, an alternative is manual collection of county-level conviction data. First, in order to determine recidivism outcomes, it is necessary to determine whether a prior conviction has taken place. Consequently, all SB-82 programs would need to record whether the individual has been convicted of a felony or misdemeanor at the point of assessment, information that is not collected and cannot be collected retrospectively. Fortunately, 12 of the 14 counties included in the SB-82 grantees have superior courts with freely accessible public online portals for conviction and arrest records (see Appendix 7 for a list of each counties portal). Hence, conviction and arrest information can be obtained by conducting case searches of individual SB-82 clients. In order to collect this client-level data, county program staff will be trained by the statewide evaluation team to conduct manual searches of a client's accessible court record 18 months subsequent to their first contact with the SB-82 funded service. If identifiers are provided, the evaluation team can search the databases. Whether the individual was convicted of a crime with a date of offense that occurred within 12 months of first contact with the service will be the primary outcome, consistent with the definition of recidivism as specified by the Board of State and Community Corrections. This data will be incorporated into the existing data collected by the program, and when required securely transferred to the statewide evaluation team for analysis. Due to the heterogeneous nature of the programs and the logistical challenges of such an endeavor, it is anticipated that this may only be feasible for a subset of the counties involved in the evaluation. However, these may give an important indication of the recidivism outcomes one may expect following receipt for SB-82 services.

One of the main strengths of the proposal include the fact that longitudinal data can be collected without the need to re-contact the client, which has been identified as a significant challenge by many of the counties during the outreach efforts. Additionally, given that court records are publicly available information, the method does not require any additional data use agreements, nor are there any data privacy issues unlike with alternatives such as attempting to obtain data via the DOJRC. With regards to limitations, one concern is the availability of the required resources at the county to conduct such a data search, though as noted above, if client data with identifiers are provided to the evaluation team, the work can be done by members of the evaluation team. Another limitation is the fact that this method will only identify recidivism outcomes in trials that are conducted within county, therefore if an individual relocates and commits a crime in a different county then this may not be evident in the records.

Contextual Factors Data Based on Stakeholder Feedback: Our quantitative evaluation aims to include a rich variety of experience and perspective to the best of our abilities. During our initial outreach to with various stakeholders on December 3, 2019, they identified two particularly important contextual factors we should include in our quantitative evaluation plan: differences in access to public transportation between counties, and differences in Medi-Cal managed care plans between counties.

To account for potential confounding variation related to access to public transportation, we will include county-level information on public transportation infrastructure from the California Transit Association (CTA). The CTA collects data on total employees, total vehicle hours, total passengers, and transit expenses by county. We will use principal component analysis (PCA) to construct an index of public transportation infrastructure across counties. PCA is a commonly used statistical technique to construct the best possible index of values to represent the total variance of each component. This technique provides the optimal balance between capturing the important information on public transit infrastructure and maintaining the efficiency of our statistical model by limiting the number of controls we include.

To account for potential confounding variation related to differences in the quality and level of service across Medi-Cal managed care plans across counties, we will include county-level information on client experience and overall quality collected annually at the county-level for each managed care plan by the California Department of Health Care Services (CA DHCS). This data is collected at the plan level, so to construct a county-level value we will weight each plan's rating by the ratio of the number of clients served by each plan to the total number of clients served by all the plans in a particular county. This will allow us to construct county-level indices of managed care plan quality and client experience. We will use these indices in our statistical analyses to account for confounding variation related to differences in Medi-Cal managed care plans.

County Characteristics: As described above, in multi-level analyses, the evaluation team will need to account for differences in the socioeconomic characteristics of each county's population. We will utilize county-level estimates of socioeconomic characteristics based on the American Community Survey (ACS) for the relevant years of the evaluation period. The ACS is a monthly household survey conducted by the Census Bureau to collect detailed personal and household characteristics from across the United States. The ACS collects data from approximately 3 million households in the United States annually, of which approximately 250,000 are in California. The Census Bureau uses the ACS to produce annualized,

detailed household and population characteristics for every county in California, including socioeconomic information that covers topics such as employment, income, and housing. The evaluation team will use this detailed county-level data to inform the quantitative analysis method and to control (in multi-level models) for important county characteristics that may influence county and statewide outcomes.

A dataset will be constructed from the ACS will include county-level information for all fifteen counties included in the SB-82 evaluation on mean and median income, education level, and population characteristics such as the fraction of the population by race and ethnicity, foreign born status, and spoken language. These county characteristics will function as indirect proxies for important differences in access to services or the types of services available in a county that can affect client outcomes within the county. Additionally, the ACS data set will include mean gross monthly rent and mean home value to account for differences in housing affordability and access between counties. While the ACS is conducted annually, it does not become available until the fall of the following year. That is, the most recent data release was the 2018 1-year sample released in September 2019. We will use the most current ACS data available at the time of the analysis to control for county differences.

6. Qualitative Evaluation

A qualitative evaluation of the SB-82 programs will also be conducted. These analyses will evaluate the programs' ability to improve client experience of care and recovery outcomes (Goal 2), reduce recidivism and law enforcement expenditure (Goal 4), and expand recovery-oriented treatment options (Goal 5), as detailed in the logic model (see Appendix 2). Each of these goals will be explored with a range of stakeholders using semi-structured interviews focusing on the aims described below.

In order to supplement the quantitative data in addressing Goal 2: "Improve experience, recovery outcomes, and reduce costs" the qualitative component of the evaluation will focus on the following aims:

- To explore clients' and family members' experiences of receiving crisis care, and its subsequent impact on their lives.
- To understand the impact of expanded crisis team deployment on mental health service provision and outcomes from the perspective of mental health providers.

In addressing this goal from the perspective of clients and families, semi-structured interview guides will be developed to focus on client experiences of how they accessed the service, the nature of the care they received at the

point of crisis, their experiences of linkage to any required additional services, how their overall experiences compares with previous crises that may have occurred prior to the SB-82 funded services being in operation, and their overall satisfaction in their service, including its impact on their path towards recovery. Examples of specific questions and prompts are detailed in the preliminary interview guides for clients (Appendix 8) and families (Appendix 9).

In order to supplement the quantitative data in addressing Goal 4: "reduce recidivism and law enforcement expenditure," the qualitative interviews will focus on the following aim:

- To understand the system-level impact of expanded crisis team services on mental health and law enforcement service provision from the perspectives of mental health and law enforcement providers.

In the interviews with the law enforcement partners, the primary topics of interest relevant to Goal 4 include exploring the impact of the collaboration with SB-82 programs on client receipt of services and outcomes, the impact of SB-82 services on their workflow as law enforcement officers, and their experience of working with families and caregivers. We will also inquire about their perception of how these programs impact public safety. Examples of questions to be asked in the interview are presented the preliminary interview guide for law enforcement, presented in Appendix 10.

In interviews with SB-82 service providers, the topics covered specific to Goal 4 include exploring the impact of SB-82 programs on the acuity and types of presentations of clients served, the barriers and facilitators to linkage to subsequent services, the benefits and challenges of collaborating with partners such as law enforcement officers, and the system-level of impact of the SB-82 programs on access to behavioral health services (for people who would otherwise have likely ended up in criminal justice settings). The preliminary interview guide for use with SB-82 providers is presented in Appendix 11.

In order to supplement the quantitative data in addressing Goal 5: "Expand crisis-recovery orientated early intervention and treatment options", the qualitative component of the evaluation will focus on the following aims:

- To explore clients' and family members' experiences of receiving follow-up care post-crisis, and whether the care received impacted engagement in recovery-oriented treatment.
- To understand the impact of expanded crisis team services engaging clients in long-term recovery-oriented care from the perspective of crisis service providers.

In the interviews with clients and family members, the interview guides will include topics relevant to Goal 5 such as the exploration of their experiences of SB-82 initiated linkage to additional services post-crisis, the nature of the services that they received, and the impact this had on their recovery. In the provider interviews, relevant topics include the immediate impact of SB-82 services on clients; success and impact of linkage to other services, and the system-level impact of SB-82 services on care provision. The preliminary interview guide for clients is available in Appendix 8 and the preliminary interview guide for families is in Appendix 9.

Method: In order to address goals 2, 4, and 5, qualitative semi-structured interviews with clients, family members, mental health crisis service providers and law enforcement officers will be conducted. Each interview will be audio-recorded and transcribed with any identifiers removed. The data will consist of the deidentified transcripts of the interviews, conducted via a secure videoconference.

Prior to recruitment, interview guides will be developed by the evaluation team to address each study goal. These interview guides will be reviewed by UCD stakeholder Committee SB-82 providers, clients, and family members prior to the interviews being conducted, and will be amended based on stakeholder feedback.

Participants: We will aim to purposively recruit approximately 55 participants in total: 15 clients, 15 family members, 10 law enforcement partners, and 15 providers. It is anticipated that saturation of the main themes should be met with this many participants. However, if saturation is not met, then additional participants will be recruited. Due to high prevalence of Spanish speakers across the state of California, qualitative interviews will be offered in both English and Spanish.

Inclusion Criteria:

For SB-82 provider participants:

- Currently employed as a healthcare provider by one of the SB-82 funded crisis programs across the state of California.

For client participants:

- Received crisis services from an SB-82 funded crisis program.

For family member participants:

- Have a family member who has received SB-82 funded crisis program services.

- Be actively involved in the care of the family who has received SB-82 funded crisis program services, as defined by either the client or the provider.

For law enforcement partner participants:

- Be a current local law enforcement employee either involved in delivering services to clients who have received SB-82 funded crisis services, or managed individuals who have received SB-82 funded crisis services, as defined/identified by county SB-82 providers.

Participant Recruitment:

Providers: Providers at each of the 15 SB-82-funded triage programs will be contacted by email and invited to take part in a teleconference-based semi-structured qualitative interview. The research team has already been in contact with all programs as part of the statewide SB-82 program evaluation.

Law Enforcement Partners: In order to recruit law enforcement partners, the SB-82 provider team will contact law enforcement partners who they identify as having had significant contact with crisis service clients during the study period, and invite them to speak to the research team about the study. Once the subject has agreed to participate, a member of the research team will get in contact via email.

Clients/Family Members: To recruit clients and family members, SB-82 providers already involved in their care will give the potential participants a study flyer and ask if they would be interested in taking part in the qualitative interview study. Upon their agreement, at the discretion of the potential participant, the provider will either provide the potential participant with the contact details of the research team, or else will provide the research team the contact details of the potential participant for a call.

Interview Frequency: For the summative evaluation, participants will be asked to participate in one interview. Including the consent process, the duration of the interview is expected to last approximately 90 minutes. There will be approximately 15 clients, 15 family members, 15 providers, and 10 law enforcement providers interviewed (n = 55).

Participant Incentives: Participants will be compensated $30 in gift cards to take part in the qualitative interview, which in addition to the consent process should take approximately 90 minutes. Approximately 15 clients, 15 family members, 15 providers, and 10 law enforcement providers will be recruited. Outside of the financial incentives of taking part, there are not expected to be any direct benefits to the participants. However, participants

will be information that their involvement may provide indirect benefits, namely providing a significant insight into best practices for triage services.

Data Analysis: The transcripts will be hand-coded by at least two qualitative researchers through a multiple coding process and analyzed utilizing an inductive approach to thematic analysis. Thematic analysis is used to identify, analyze, and interpret patterns in data (Braun & Clark, 2006). Stakeholders will be involved in both the development of the interview guide, and in the interpretation of the findings by way of reviewing the coding framework, to ensure that their perspectives were accurately reflected in the work.

The findings will be considered within county, program, and current and prior behavioral health infrastructure contexts, including those specifically identified during the stakeholder process conducted as part of Question 2 of the Process Evaluation (see Deliverable 4: Process Evaluation). The qualitative findings will enhance interpretation of quantitative findings and supplement in cases where limited data are available for quantitative analysis. The findings from the summative qualitative evaluation will be reported in Year 5, Quarter 3, as part of Deliverable 13 (Draft of Evaluation Report). These findings will be compared to the quantitative data utilizing a convergence coding matrix, consistent with the triangulation protocol (Farmer et al., 2006).

7. Conclusion

This Summative Evaluation Plan employs four key elements – population, intervention, comparator, and outcomes – and feedback from stakeholders in a question-based framework to address five key evaluation questions. The evaluation team has presented analysis plans for each of the key evaluation questions that leverages data from county behavioral health programs and other sources, to answer those questions as rigorously as possible. Our plans include feedback from stakeholders and will continue to incorporate stakeholder input to shape the Summative Evaluation process. The Summative Evaluation Plan will provide an understanding of how county SB-82 expansions changed the client experience and client outcomes and will produce critical knowledge that can be used to continue improving community-based behavioral health services throughout California in the future.

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Appendix 1. Stakeholder Meeting Summary

There were 9 people in attendance at the stakeholder meeting held on December 3rd. Two eligible participants were compensated $175 each for their time via Amazon gift cards. The UC Davis evaluation team provided an overview of the evaluation, its purpose, and presented a brief summary of both the existing literature and the crisis continuum.

Stakeholders discussed issues that they see working with those in mental health crisis including: lack of continuity of care, problems associated with hospitalization and what constitutes "good" care, the need for client-centered care and community education that includes family/peer advocates. Stakeholders also highlighted the need for diverse services addressing social needs such as housing and transportation in addition to transitional and long-term care. Individual stakeholders brought up what they know are happening in surrounding counties such as transportation services (county vans) and mobile crisis units.

Issues and suggestions to data collection was also discussed. Participants highlighted the importance of capturing data on those who fall through the cracks including those who do not follow up or receive referrals and how to track this data, using Avatar to collect client's histories for the purpose of comparing multiple mental health crises across different health systems and/or agencies. The need for collecting qualitative data through using focus groups with mental health providers was mentioned as a way to better understand the distribution and integration of services, communication across agencies and the use of telemedicine for treating those in mental health crisis. The importance of tacking ways to prevent mental health crisis was also addressed.

Future Stakeholder Directions

Communication with stakeholders is led by Marissa Vismara. She plans to implement:

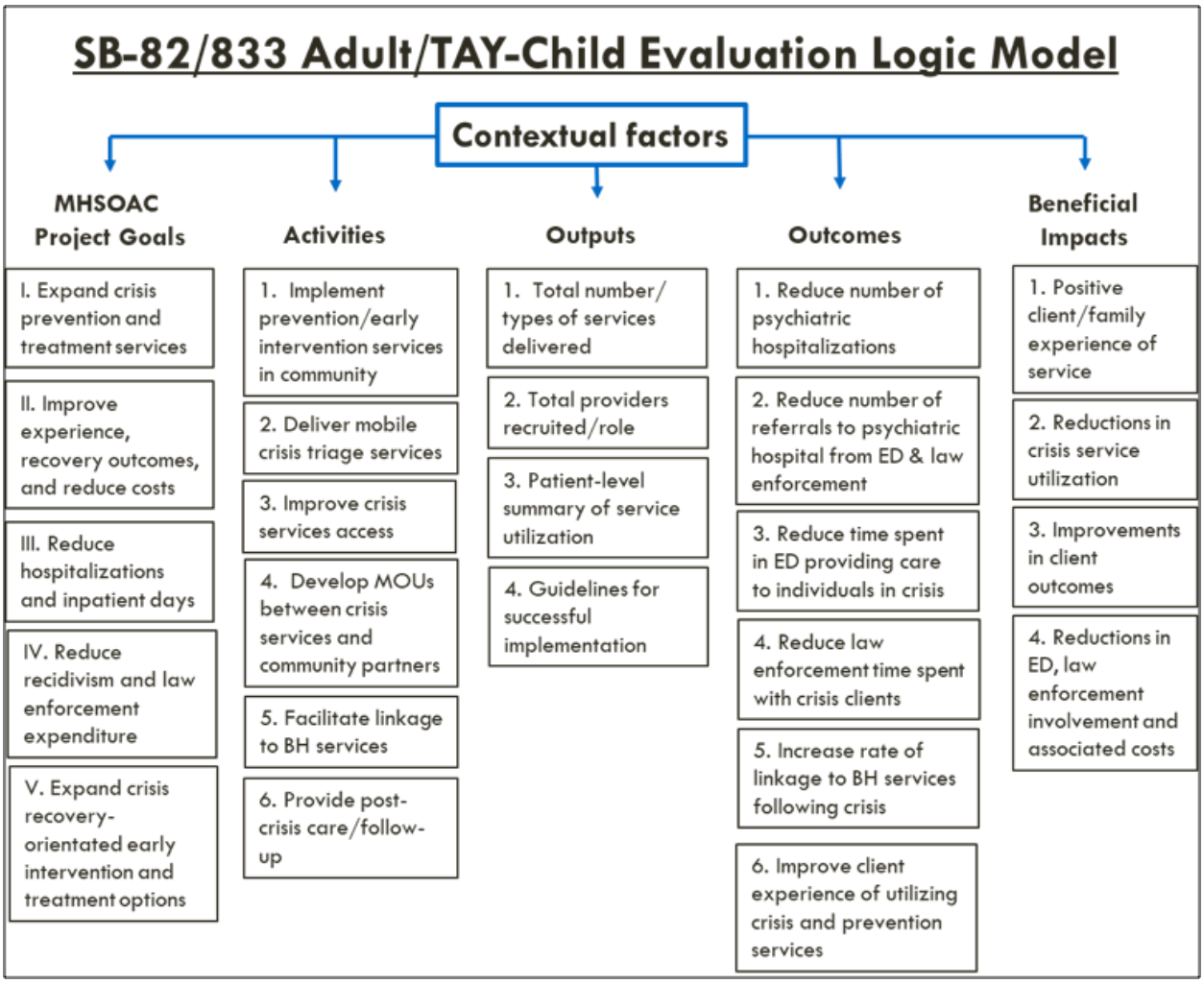
- Periodic emails (every 3-5 months) to share project updates
- Future in-person dates: June 2020, December 2020, June 2021, December 2021
- Monthly Zoom calls with Stakeholders to commence in February 2020
- Stakeholder communication to be integrated into SB-82 quarterly newsletters

Stakeholder recruitment led by Marissa Vismara has been successful and is ongoing. It includes individuals with professional or person experiences with SB-82 programs located in Northern California to start, and will include

Central and Southern California as our network expands. The UC Davis team intends to include 3-5 stakeholders from these areas by the end of Year 3.

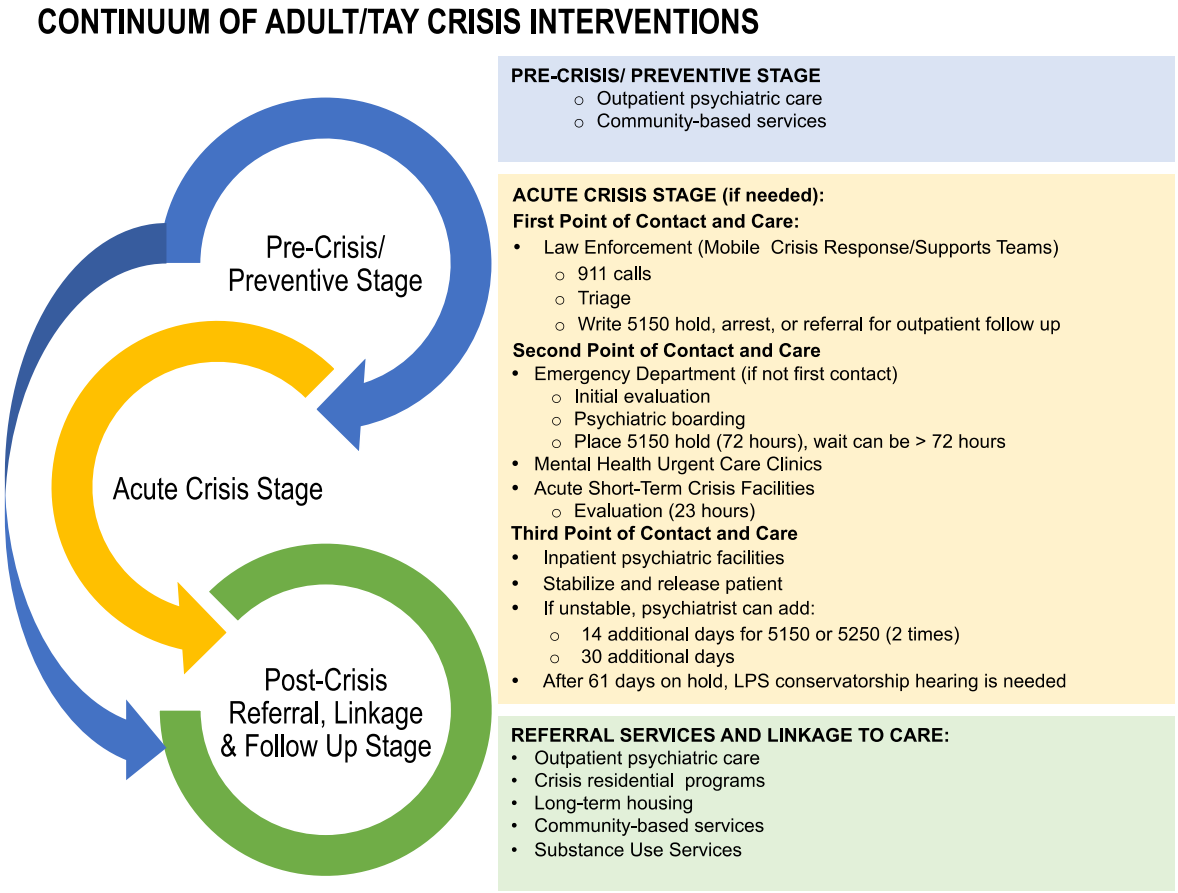
Appendix 2. Logic Model

The figure represents the logic model of the SB-82 triage program evaluation. The model details the project primary aims, as proposed by the MHSOAC; the activities conducted by the programs in order to meet the proposed aims; a measure of those proposed activities (outputs), a measure of the outcome of the activities; and the longer-term beneficial changes expected to occur as a consequence of the program (beneficial impacts).



Appendix 3. Crisis Continuum

The Crisis Continuum is a conceptual framework that maps mental health care services into the three stages of mental health crisis: the pre-crisis/preventive stage, the acute crisis stage, and the post-crisis referral/follow-up stage. It is used to understand which mental health care services a patient in crisis needs on their path toward recovery.



Appendix 4. Priority Clusters

Priority Cluster	Evaluation Questions	Counties
First Responders	- Reduce the rate of psychiatric hospitalizations. - Reduce the rate of mental Health emergency department encounters. - Reduce the time law enforcement spends with crisis clients. - Reduce recidivism among crisis clients.	Butte, Humboldt, Los Angeles, San Francisco, Sonoma, Yolo
Crisis	- Reduce the rate of psychiatric hospitalizations. - Reduce the rate of mental Health emergency department encounters. - Reduce recidivism among crisis clients.	City of Berkeley, Los Angeles, Merced, Sacramento, San Francisco, Stanislaus, Tuolumne
Linkage	- Reduce the rate of psychiatric hospitalizations. - Increase the utilization of post-crisis behavioral health services. - Reduce recidivism among crisis clients.	Alameda, Butte, Calaveras, City of Berkeley, Humboldt, Merced, Placer, Sacramento, San Francisco, Tuolumne, Ventura, Yolo

Appendix 5. Partial OSHPD ICD-10 Code Set for Identifying Mental Health Encounters

The following is a partial list of ICD-10 codes we will use to identify mental health encounters in the OSHPD emergency department encounter dataset. The full list of ICD-10 codes contains 1,377 ICD-10 codes; the list below includes the major 251 codes.

ICD-10 Code	Description
F06.0	Psychotic disorder with hallucinations due to known physiological condition
F06.1	Catatonic disorder due to known physiological condition
F06.2	Psychotic disorder with delusions due to known physiological condition
F06.30	Mood disorder due to known physiological condition, unspecified
F06.31	Mood disorder due to known physiological condition with depressive features
F06.32	Mood disorder due to known physiological condition with major depressive-like episode
F06.33	Mood disorder due to known physiological condition with manic features
F06.34	Mood disorder due to known physiological condition with mixed features
F06.4	Anxiety disorder due to known physiological condition
F06.8	Other specified mental disorders due to known physiological condition
F12.23	Cannabis dependence with withdrawal
F12.93	Cannabis use, unspecified with withdrawal
F19.10	Other psychoactive substance abuse, uncomplicated
F19.11	Other psychoactive substance abuse, in remission
F19.120	Other psychoactive substance abuse with intoxication, uncomplicated
F19.90	Other psychoactive substance use, unspecified, uncomplicated
F20.0	Paranoid schizophrenia
F20.1	Disorganized schizophrenia
F20.2	Catatonic schizophrenia
F20.3	Undifferentiated schizophrenia
F20.5	Residual schizophrenia
F20.81	Schizophreniform disorder
F20.89	Other schizophrenia
F20.9	Schizophrenia, unspecified
F21.	Schizotypal disorder
F22.	Delusional disorders

F23.	Brief psychotic disorder
F24.	Shared psychotic disorder
F25.0	Schizoaffective disorder, bipolar type
F25.1	Schizoaffective disorder, depressive type
F25.8	Other schizoaffective disorders
F25.9	Schizoaffective disorder, unspecified
F28.	Other psychotic disorder not due to a substance or known physiological condition
F29.	Unspecified psychosis not due to a substance or known physiological condition
F30.10	Manic episode without psychotic symptoms, unspecified
F30.11	Manic episode without psychotic symptoms, mild
F30.12	Manic episode without psychotic symptoms, moderate
F30.13	Manic episode, severe, without psychotic symptoms
F30.2	Manic episode, severe with psychotic symptoms
F30.3	Manic episode in partial remission
F30.4	Manic episode in full remission
F30.8	Other manic episodes
F30.9	Manic episode, unspecified
F31.0	Bipolar disorder, current episode hypomanic
F31.10	Bipolar disorder, current episode manic without psychotic features, unspecified
F31.11	Bipolar disorder, current episode manic without psychotic features, mild
F31.12	Bipolar disorder, current episode manic without psychotic features, moderate
F31.13	Bipolar disorder, current episode manic without psychotic features, severe
F31.2	Bipolar disorder, current episode manic severe with psychotic features
F31.30	Bipolar disorder, current episode depressed, mild or moderate severity, unspecified
F31.31	Bipolar disorder, current episode depressed, mild
F31.32	Bipolar disorder, current episode depressed, moderate
F31.4	Bipolar disorder, current episode depressed, severe, without psychotic features
F31.5	Bipolar disorder, current episode depressed, severe, with psychotic features
F31.60	Bipolar disorder, current episode mixed, unspecified
F31.61	Bipolar disorder, current episode mixed, mild
F31.62	Bipolar disorder, current episode mixed, moderate
F31.63	Bipolar disorder, current episode mixed, severe, without psychotic features

F31.64	Bipolar disorder, current episode mixed, severe, with psychotic features
F31.70	Bipolar disorder, currently in remission, most recent episode unspecified
F31.71	Bipolar disorder, in partial remission, most recent episode hypomanic
F31.72	Bipolar disorder, in full remission, most recent episode hypomanic
F31.73	Bipolar disorder, in partial remission, most recent episode manic
F31.74	Bipolar disorder, in full remission, most recent episode manic
F31.75	Bipolar disorder, in partial remission, most recent episode depressed
F31.76	Bipolar disorder, in full remission, most recent episode depressed
F31.77	Bipolar disorder, in partial remission, most recent episode mixed
F31.78	Bipolar disorder, in full remission, most recent episode mixed
F31.81	Bipolar II disorder
F31.89	Other bipolar disorder
F31.9	Bipolar disorder, unspecified
F32.0	Major depressive disorder, single episode, mild
F32.1	Major depressive disorder, single episode, moderate
F32.2	Major depressive disorder, single episode, severe without psychotic features
F32.3	Major depressive disorder, single episode, severe with psychotic features
F32.4	Major depressive disorder, single episode, in partial remission
F32.5	Major depressive disorder, single episode, in full remission
F32.89	Other specified depressive episodes
F32.9	Major depressive disorder, single episode, unspecified
F33.0	Major depressive disorder, recurrent, mild
F33.1	Major depressive disorder, recurrent, moderate
F33.2	Major depressive disorder, recurrent severe without psychotic features
F33.3	Major depressive disorder, recurrent, severe with psychotic symptoms
F33.40	Major depressive disorder, recurrent, in remission, unspecified
F33.41	Major depressive disorder, recurrent, in partial remission
F33.42	Major depressive disorder, recurrent, in full remission
F33.8	Other recurrent depressive disorders
F33.9	Major depressive disorder, recurrent, unspecified
F34.0	Cyclothymic disorder

F34.1	Dysthymic disorder
F34.81	Disruptive mood dysregulation disorder
F34.89	Other specified persistent mood disorders
F34.9	Persistent mood [affective] disorder, unspecified
F39.	Unspecified mood [affective] disorder
F40.00	Agoraphobia, unspecified
F40.01	Agoraphobia with panic disorder
F40.02	Agoraphobia without panic disorder
F40.10	Social phobia, unspecified
F40.11	Social phobia, generalized
F40.210	Arachnophobia
F40.218	Other animal type phobia
F40.220	Fear of thunderstorms
F40.228	Other natural environment type phobia
F40.230	Fear of blood
F40.231	Fear of injections and transfusions
F40.232	Fear of other medical care
F40.233	Fear of injury
F40.240	Claustrophobia
F40.241	Acrophobia
F40.242	Fear of bridges
F40.243	Fear of flying
F40.248	Other situational type phobia
F40.290	Androphobia
F40.291	Gynephobia
F40.298	Other specified phobia
F40.8	Other phobic anxiety disorders
F40.9	Phobic anxiety disorder, unspecified
F41.0	Panic disorder [episodic paroxysmal anxiety]
F41.1	Generalized anxiety disorder
F41.3	Other mixed anxiety disorders
F41.8	Other specified anxiety disorders
F41.9	Anxiety disorder, unspecified
F42.2	Mixed obsessional thoughts and acts
F42.3	Hoarding disorder
F42.4	Excoriation (skin-picking) disorder
F42.8	Other obsessive-compulsive disorder
F42.9	Obsessive-compulsive disorder, unspecified
F43.0	Acute stress reaction
F43.10	Post-traumatic stress disorder, unspecified
F43.11	Post-traumatic stress disorder, acute
F43.12	Post-traumatic stress disorder, chronic

F43.20	Adjustment disorder, unspecified
F43.21	Adjustment disorder with depressed mood
F43.22	Adjustment disorder with anxiety
F43.23	Adjustment disorder with mixed anxiety and depressed mood
F43.24	Adjustment disorder with disturbance of conduct
F43.25	Adjustment disorder with mixed disturbance of emotions and conduct
F43.29	Adjustment disorder with other symptoms
F43.8	Other reactions to severe stress
F43.9	Reaction to severe stress, unspecified
F44.0	Dissociative amnesia
F44.1	Dissociative fugue
F44.2	Dissociative stupor
F44.4	Conversion disorder with motor symptom or deficit
F44.5	Conversion disorder with seizures or convulsions
F44.6	Conversion disorder with sensory symptom or deficit
F44.7	Conversion disorder with mixed symptom presentation
F44.81	Dissociative identity disorder
F44.89	Other dissociative and conversion disorders
F44.9	Dissociative and conversion disorder, unspecified
F45.0	Somatization disorder
F45.1	Undifferentiated somatoform disorder
F45.20	Hypochondriacal disorder, unspecified
F45.21	Hypochondriasis
F45.22	Body dysmorphic disorder
F45.29	Other hypochondriacal disorders
F45.41	Pain disorder exclusively related to psychological factors
F45.42	Pain disorder with related psychological factors
F45.8	Other somatoform disorders
F45.9	Somatoform disorder, unspecified
F48.1	Depersonalization-derealization syndrome
F48.8	Other specified nonpsychotic mental disorders
F48.9	Nonpsychotic mental disorder, unspecified
F50.00	Anorexia nervosa, unspecified
F50.01	Anorexia nervosa, restricting type
F50.02	Anorexia nervosa, binge eating/purging type
F50.2	Bulimia nervosa
F50.81	Binge eating disorder
F50.82	Avoidant/restrictive food intake disorder
F50.89	Other specified eating disorder
F50.9	Eating disorder, unspecified
F51.01	Primary insomnia

F51.02	Adjustment insomnia
F51.03	Paradoxical insomnia
F51.09	Other insomnia not due to a substance or known physiological condition
F51.11	Primary hypersomnia
F51.12	Insufficient sleep syndrome
F51.19	Other hypersomnia not due to a substance or known physiological condition
F51.3	Sleepwalking [somnambulism]
F51.4	Sleep terrors [night terrors]
F51.5	Nightmare disorder
F51.8	Other sleep disorders not due to a substance or known physiological condition
F52.5	Vaginismus not due to a substance or known physiological condition
F53.	Puerperal psychosis
F53.0	Postpartum depression
F53.1	Puerperal psychosis
F59.	Unspecified behavioral syndromes associated with physiological disturbances and physical factors
F60.0	Paranoid personality disorder
F60.1	Schizoid personality disorder
F60.2	Antisocial personality disorder
F60.3	Borderline personality disorder
F60.4	Histrionic personality disorder
F60.5	Obsessive-compulsive personality disorder
F60.6	Avoidant personality disorder
F60.7	Dependent personality disorder
F60.81	Narcissistic personality disorder
F60.89	Other specific personality disorders
F60.9	Personality disorder, unspecified
F63.0	Pathological gambling
F63.1	Pyromania
F63.2	Kleptomania
F63.3	Trichotillomania
F63.81	Intermittent explosive disorder
F63.89	Other impulse disorders
F63.9	Impulse disorder, unspecified
F68.10	Factitious disorder, unspecified
F68.11	Factitious disorder with predominantly psychological signs and symptoms
F68.12	Factitious disorder with predominantly physical signs and symptoms

F68.13	Factitious disorder with combined psychological and physical signs and symptoms
F68.8	Other specified disorders of adult personality and behavior
F68.A	Factitious disorder imposed on another
F69.	Unspecified disorder of adult personality and behavior
F81.0	Specific reading disorder
F81.9	Developmental disorder of scholastic skills, unspecified
F90.0	Attention-deficit hyperactivity disorder, predominantly inattentive type
F90.1	Attention-deficit hyperactivity disorder, predominantly hyperactive type
F90.2	Attention-deficit hyperactivity disorder, combined type
F90.8	Attention-deficit hyperactivity disorder, other type
F90.9	Attention-deficit hyperactivity disorder, unspecified type
F91.0	Conduct disorder confined to family context
F91.1	Conduct disorder, childhood-onset type
F91.2	Conduct disorder, adolescent-onset type
F91.3	Oppositional defiant disorder
F91.8	Other conduct disorders
F91.9	Conduct disorder, unspecified
F93.0	Separation anxiety disorder of childhood
F93.8	Other childhood emotional disorders
F93.9	Childhood emotional disorder, unspecified
F94.0	Selective mutism
F94.1	Reactive attachment disorder of childhood
F94.2	Disinhibited attachment disorder of childhood
F94.8	Other childhood disorders of social functioning
F94.9	Childhood disorder of social functioning, unspecified
F98.21	Rumination disorder of infancy
F98.29	Other feeding disorders of infancy and early childhood
F98.8	Other specified behavioral and emotional disorders with onset usually occurring in childhood and adolescence
F98.9	Unspecified behavioral and emotional disorders with onset usually occurring in childhood and adolescence
F99.	Mental disorder, not otherwise specified
R41.83	Borderline intellectual functioning
R45.1	Restlessness and agitation
R45.2	Unhappiness
R45.5	Hostility
R45.6	Violent behavior
R45.7	State of emotional shock and stress, unspecified
R45.81	Low self-esteem
R45.82	Worries

R45.850	Homicidal ideations
R45.851	Suicidal ideations
R46.81	Obsessive-compulsive behavior
R46.89	Other symptoms and signs involving appearance and behavior
R48.0	Dyslexia and alexia

Appendix 6. Summary and Description of CSI Data Elements

The following summary of the data is based on the published CSI data dictionary. The data we obtain from counties will not be CSI data, but will resemble data contained in the CSI system, so a summary of CSI data elements is demonstrative of available data elements.

Variable name	Description
Mental Health Plan Record	Identifies the submitting county/city/mental health plan.
County Client Number	Agency/institution-specific client identification number
From Report Period	The first year and month of the report period
Through Report Period	The last year and month of the report period
Client Record Count	Number of client records within the submission file
Gender	Gender
Primary Language	Primary language
Preferred Language	Preferred language
Ethnicity	Client is Hispanic/Latino
Race	Race
Education	Identifies the highest grade level completed by the client
Employment Status	Identifies the current employment status of the client.
Special Population	Identifies any special population services
Client Index Number	Identifies Medi-Cal or Healthy Families Plan recipients.
Entity with fiscal responsibility	Identifies the county/city/mental health plan responsible for directly or indirectly paying for the client's services
Axis-V / GAF Rating	Identifies the Global Assessment of Functioning rating of the client.
Substance Abuse/Dependence	Identifies whether the client has a substance abuse/dependence issue
Substance Abuse/Dependence Diagnosis	Identifies the client's substance abuse/dependence diagnosis, if any
Trauma	Identifies clients that have experienced a traumatic event
Conservatorship/Court Status	Identifies if client has a conservatorship or juvenile court status
Place of service	Identifies the location where the service was rendered

Provider number	Identifies the organization providing a service.
Mode of Service	Broad category of service
Service Function	The type of service received by the client within mode of service
Units of Service	Quantity of services provided
Units of Time	Amount of time utilized for Day Services or Outpatient Services
Patient Status Code	Indicates the status of the client as of the Through/Exit Date
Legal Class--Admission	Identifies the legal class under which the client is admitted to acute 24-hour mental health services
Legal Class--Discharge	Identifies the legal class of the client at the time of discharge from acute 24-hour mental health services.
Admission Necessity Code	Identifies the type or reason for the client's admission
Evidence-Based Practices/Service Strategies	Identifies up to three Evidence-Based Practices/Service Strategies the client received

Appendix 7. County Portals for Conviction and Arrest Records

County	Superior Court Records Portal
Alameda	http://www.alameda.courts.ca.gov/Pages.aspx/DomainWeb
Butte	https://cabutteodyprod.tylerhost.net/Portal
Calaveras	https://cacalaverasportal.tylerhost.net/Portal/
Humboldt	No online portal
Los Angeles	http://www.lacourt.org/website/FindaCase.aspx
Merced	https://www.mercedcourt.org/records_search.shtml
Placer	https://webportal.placerco.org/eCourtPublic/
Sacramento	https://services.saccourt.ca.gov/PublicCaseAccess/
San Francisco	https://www.sfsuperiorcourt.org/general-info/records
Sonoma	https://cmsportal.sonomacourt.org/iportal
Stanislaus	https://portal.stanct.org/Portal/
Tuolumne	No online portal
Ventura	https://secured.countyofventura.org/courtservices/CourtServiceHome.aspx
Yolo	https://oneweb.yolo.courts.ca.gov/OneWebCaseInquiry/#/caseInquiry

Appendix 8. Preliminary Interview Guide for Clients

Reason for Contact:

Could you please describe what you experienced that led to the crisis triage team being involved in your care?

Access:

- How did you come into contact with this service? (Did you call someone? Did they approach you? Did someone else call the service? Did you go to the service location?)
- Who did you first talk to in the service?
    - What was your first impression of them?
- IF THEY REACHED OUT TO SERVICE:
    - How did you find out about the service?
    - What was your experience of getting in contact with them?

Care at Point of Crisis:

- Do you remember who was involved in your care during your experience (law enforcement, ED staff, and/or crisis program members)?
- Were each of them helpful or unhelpful? If so, in what way?
- What was your experience like of receiving care from the crisis team?
    - Do you feel like you received the support you needed?
    - What went well (if anything)?
    - What did not go well, or could have gone better (if anything)?

Linkage to Additional Services:

- After the assessment, did they refer you on to additional services (CSU, community care, etc.)?
    - IF YES:
        - What did that process look like?
        - Did you go on to receive care from that service?
        - Has engaging in this led to any changes in your life (positive or negative)?
        - Do you think you would have come into contact with this service without the referral from the crisis team?
    - IF NO: How did your interaction with the service end?
        - Do you think you would have benefited from additional services at that time?

History of Crises:

- Have you experienced a similar type of crisis to the one we have just discussed in the past?
    - IF YES
        - What services did you receive then (if any)?

    - What was the outcome?
    - Comparing the two situations, on what occasion do you think your needs were served better? Why?

Overall Satisfaction with the Crisis Team:

- Overall, how satisfied were you with the care you received from the crisis team?
- Is there anything in particular that you liked?
- Was there anything that you didn't like, or could have been better?

Final Questions:

- Is there anything else you think might be important for us to know to understand your experience better?
- Can you think of anything that might make a service like this work better?

Appendix 9. Preliminary Interview Guide for Families

Relationship to Client:

- I understand that a family member of yours recently received care from the crisis triage service. What is your relationship to that person?
- Could you talk a little bit about what happened to lead to the crisis team being involved in this person's care?

Access:

- Do you know how they came into contact with this service? (Did you contact them, somebody else?)
- IF THEY REACHED OUT TO SERVICE:
    - How did you find out about the service?
    - What was your experience of getting in contact with them?
- Were you present when the crisis team made contact with your [family member]?
    - What was your first impression of the services they received?
- IF THEY WERE NOT PRESENT WHEN THE PERSON RECEIVED CRISIS CARE
    - How did you find out that they received this service?
    - Did you find out in the way you would want to? If not, how do you think you should have been informed?

Care at Point of Crisis:

- During the crisis situation, do you feel like your [family member] received the support they needed?
- Did you feel like you needed support during this period? If so, did you get the support you feel like you needed?
- What went well (if anything)?
- What did not go well, or could have gone better (if anything)?

Linkage:

- Were they connected to any other services as a result of the crisis service?
    - IF YES:
        - What did that process look like?
        - Did they go on to receive care from that service?
        - Do you think engaging in the service led to any changes for your [family member] (positive or negative?)
        - Do you think it's likely that they would have come into contact with this service without the referral from the crisis team?

        - Did you feel like you needed support during this period? If so, did you get the support you feel like you needed?
    - IF NO: Do you know how their interaction with the service ended?
        - Do you think they would have benefited from additional services at that time?
        - Do you think you would have benefited from additional support/services during that time?

History of Crises:

- Has your family member ever experienced a similar type of crisis before?
    - If Yes:
        - What services did they receive then?
        - What was the outcome?
        - Comparing the two situations, on what occasion do you think their needs were served better? Why?

Overall Satisfaction with the Crisis Team:

- Overall, how satisfied were you with the care your family member received from the crisis team?
- Is there anything in particular that you liked?
- Was there anything that you didn't like, or could have been better?
- Did your family member's utilization of the crisis service have any impact on you? How so?

Final Questions:

- Is there anything else you think might be important for us to know to understand your and your family member's experience better?
- Can you think of anything that might make a service like this work better?

Appendix 10. Preliminary Interview Guide for Law Enforcement

Access:

- In what ways do you typically come into contact with individuals experiencing a mental health crisis in the course of your job?

Collaboration

- In what ways do you engage with crisis triage team providers?
- What are the positive parts of working with the crisis triage providers (if any)?
- What are the negative parts of working with the crisis triage providers (if any)?

Impact of Collaboration on Client Care

- In your experience, do you think the presence of the crisis service team provider impacts the immediate outcome that individual experiences (i.e. being arrested, admitted to a psychiatric ward, etc.)?
- Do you think the presence of the crisis service team provider impacts the longer-term outcomes that individual experiences in any way (recurrence of crisis, engagement in care, etc.)?

Impact of Collaboration on Workflow

- Has the crisis program impacted the way that you conduct your role with individuals experiencing a mental health crisis? If so, how?
- Has working with the mobile crisis team impacted the amount of work you have to do with individuals experiencing a crisis? Has it increased or decreased the volume of work you have to do?
- Does working in conjunction with crisis service providers make it easier or harder to work in mental health crisis situations?
- Since liaising with the crisis team, has this changed how you interact with individuals who are experiencing a mental health crisis during the course of your job?

Working with Families/Caregivers

- Do you typically come into contact with the families of individuals who are experiencing a mental health crisis?
    - If so, in your experience, has the crisis program had an impact on the level of support that the family member received during the period of crisis?

Final Questions:

- Is there anything else you think might be important for us to consider when trying to understand your experiences of working with the Triage program?

- Can you think of anything that might make the crisis triage service work better for mental health providers, clients, or law enforcement partners?

Appendix 11. Preliminary Interview Guide for SB-82 Providers

Program Composition:

- Could you please provide a summary of the services that your program provides?
- What is your role in this program?
- In what ways do you typically come into contact with individuals experiencing a mental health crisis in the course of your job?

Immediate Impact on Clients

- What is the typical presentation of the clients you see in your service?
- What kind of services would a person receive from you in that situation?
- What is the immediate impact you've seen from providing these services?
- What kind of care would these clients receive if this service didn't exist?
- What kind of impact do you think this might have on client outcomes?

Linkage to Other Services:

- Where do clients usually go after they have received services from your program
- Does this involve linking clients to additional services?
  IF YES:
  - How successful or unsuccessful has your service been at linking clients to these services?
  - Do you think clients receiving these additional services has an impact on recovery outcomes? If so, in what way?
  - In your experience, what kind of services would clients go on to receive if they haven't received care from your service? Would it be the same or different?
    - IF DIFFERENT: What kind of impact do you think this difference might cause?

Collaboration on Client Care

- Does your service collaborate with any other entities (i.e. Law enforcement, ED staff, Behavioral Health, etc.)?

IF YES:

- What is the experience of working together in these crisis situations?
- Does the presence of the community partner impact the immediate outcome of your clients? If so, in what way?
- Do you think the presence of the community partner impacts the longer-term outcomes that individual experiences in any way?

Collaboration on Client Care

- Does your service include peer providers?

IF YES:

- Is the peer involved in the initial contact with the client?
    - If so, in what way?
    - Does their involvement impact the immediate outcome of your clients in any way?
- Assuming you provide it, is the peer involved in the follow-up/linkage piece of your service?
    - If so, in what way?
    - Does their involvement impact the immediate outcome of your clients in any way?

Working with Families/Caregivers

- Do you typically come into contact with the families of individuals who are experiencing a mental health crisis?
    - If so, what kind of support/services do you provide the families, if anything?
    - Do you think this has any impact on how the families managed the crisis situation?
    - Do you think working with the families in this way has any impact on the clients during the crisis period?
- Do you typically have any contact with the families during the post-crisis period?
    - If so, what kind of support/services do you provide the families during this period, if anything?
    - Do you think this has any impact on how the families are able to manage the situation?
    - Do you think this has any impact on the client's care or treatment outcomes?
- If the client did not receive any care from your service during a period of crisis, do you think the experience of the families would be different? If yes, in what way?

System-Level Impact

- Do you think this program impacted the overall mental health system in your county in any way? How so?

Final Questions:

- Is there anything else you think might be important for us to consider when trying to understand your experiences of delivering crisis care?
- Is there anything else important for us to consider when we think about the impact of this service on clients?